

ABSTRACT OF THE DISCLOSURE

An apparatus and method for calibrating machine vision measuring systems that have more than one camera are disclosed. A first calibration target is mounted in a fixed relationship to a first camera of the machine vision measuring system. A third camera
5 mounted in a fixed relationship to a second camera of the machine vision measuring system. Second and third calibration targets are mounted in a fixed relationship to one another and viewable by the first camera and by the third camera. A data processor is programmed to compute calibration of the first camera and the second camera, based on a position of the second calibration target relative to the third calibration target and based
10 on a position of the first camera with respect to the third camera. The apparatus and method provide a way to continuously measure the positions of two or more cameras used in the measuring system, and to use such measurements to calibrate the system. If the cameras move with respect to each other, their respective positions are calculated and used in subsequent measurements. The apparatus and method enable a machine vision
15 measuring system to be used without field calibration at the time of installation.